

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-40

WASTEWATER RECLAMATION REQUIREMENTS FOR:

SOUTH BAYSIDE SYSTEM AUTHORITY AND SIBCO
REDWOOD CITY,
SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, finds that:

1. The South Bayside System Authority, hereinafter referred to as the producer, submitted a report of waste discharge dated April 16, 1985.
2. The producer proposes to divert up to 0.34 million gallons per day (mgd) of advanced secondary treated effluent from the treatment facilities for the purpose of seasonal golf course landscape irrigation. The reclaimed wastewater will be transmitted and applied by SIBCO hereinafter referred to as the user, to the golf course driving range via a fixed irrigation system. The approximate location of the 8 acres of irrigated area is shown in Attachment "A", which is hereby made part of this Order.
3. The City of Redwood City has determined that this project is categorically exempt from the California Environmental Quality Act. The Regional Board has reviewed the project and concurs with the finding that the project will not have a substantial adverse impact on the environment.
4. Section 13523 of the California Water Code provides that a regional board, after consulting with and receiving the recommendations of the State Department of Public Health, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. The use of reclaimed water for the purposes specified in Paragraph 2, could affect the public health, safety, or welfare, and requirements for those uses are therefore necessary in accordance with the Water Code.

5. The Board adopted a revised Water Quality Control Plan for San Francisco Bay Basin in July 1982. The water quality objectives for reclaimed wastewater, as set forth in the Basin Plan, specify those limits prescribed in Title 17, Section 8025 through 8050, California Administrative Code. These objectives have been superseded by Title 22, Sections 6031 - 60357, California Administrative Code (statewide reclamation criteria).
6. The producer will be responsible for delivering water of acceptable quality to the treatment plant boundary. The user will be responsible for 1) conveying the treated effluent to the driving range, 2) the application of effluent on the specified use area, and 3) operating and maintaining the facilities with which this will be accomplished.
7. The wastewater reclamation requirements are in conformance with the statewide reclamation criteria established by the State Department of Health.
8. This Regional Board has notified the South Bayside System Authority (the producer) and SIBCO (the User) and interested agencies and persons of its intent to prescribe water reclamation requirements for the proposed uses.
9. This Board at a public meeting heard and considered all comments pertaining to this reuse.

IT IS HEREBY ORDERED, that the producer and user, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Reclaimed Wastewater Use Specifications

1. The treatment, distribution or reuse of reclaimed water shall not create a nuisance as defined in Section 13050(M) of the California Water Code.
2. The reclaimed water shall be at all times an adequately disinfected, oxidized water and shall meet the following quality limits at all times:

5-day BOD	30.0 mg/l maximum
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Dissolved Oxygen	2.0 mg/l, minimum
Dissolved Sulfide	0.1 mg/l, maximum
Coliform Organisms	Median MPN shall not exceed 23 coliform organisms per 100 milliliters of sample at some point in the treatment process. The median value will be determined from the bacteriological results of the last seven (7) analyses. Any two consecutive samples shall not exceed 240 MPN/100 ml.

3. All above ground equipment, including pumps, piping and valves, etc., which may at any time contain waste shall be adequately and clearly identified with warning signs and user shall make all necessary provisions, in addition, to inform the public that the liquid contained in reclamation equipment is treated sewage and is unfit for human consumption.
4. Areas irrigated with reclaimed wastewater shall be clearly identified with posted notices to the public.
5. Employees of the users should be made aware of the potential health hazards involved with contact or ingestion of reclaimed wastewater. California State Health Department's Guidelines for worker protection at reclaimed wastewater use areas should be followed.
6. The discharge of reclaimed wastewater to the use area by the producer shall cease immediately upon indication that the reclaimed wastewater does not comply with any quality specification.

B Reclaimed Wastewater Use Prohibitions

1. No wastewater shall be applied to the disposal area during periods of rainfall or when soils are saturated.
2. No reclaimed wastewater used for irrigation shall be allowed to escape to areas outside the irrigation areas, either by surface flow or airborne spray.
3. Wastewater shall not be applied to disposal areas in such a manner or at such times as to expose golfers or other individuals to contact with spray droplets.

4. Use of reclaimed wastewater shall be limited to irrigation of the area specified in Finding 2 of this order.
5. No reclaimed wastewater used for irrigation shall be applied closer than fifty (50) feet from picnic tables and other food and drinking water outlets.

C. Provisions

1. This Order includes items 1, 2, 3, 4, 5, 7, 8, 9 and 10 of the attached "Requirements of Design for Reclamation Facilities" dated October 1, 1975.
2. The User shall submit a report satisfactory to the Regional Board Executive Officer describing and evaluating the proposed irrigation practices, application rates and procedures, irrigation equipment and fixtures and the system design and operation to minimize public contact with reclaimed water and to prevent possible cross connections to potable water supply system. Such cross connection control program shall be approved by the San Mateo County Office of Environmental Health. The report shall indicate the users ability to comply with use prohibition number 2 (run off limitation) and shall be submitted at least 10 days prior to initiating use of reclaimed wastewater. The Executive Officer shall consider the comments of the San Mateo County Office of Environmental Health on the adequacy of the design and proposed operation of the reclamation project.
3. Before any reclaimed water is delivered to the user, the producer and user shall submit an agreement, acceptable to the Executive Officer, delineating their respective responsibilities and obligations regarding means for ensuring effluent quality during all periods of delivery to the use area, where effluent will be diverted from the treatment processes, how delivery will initiated and terminated, how the reclaimed water will be delivered to the user, when the discharge becomes the responsibility of the user, and all other pertinent information.
4. The user is responsible for submitting on-site observation reports to producer who will compile and file with the Regional Board technical reports on self-monitoring work performed according to detailed specifications as directed by the Executive Officer.

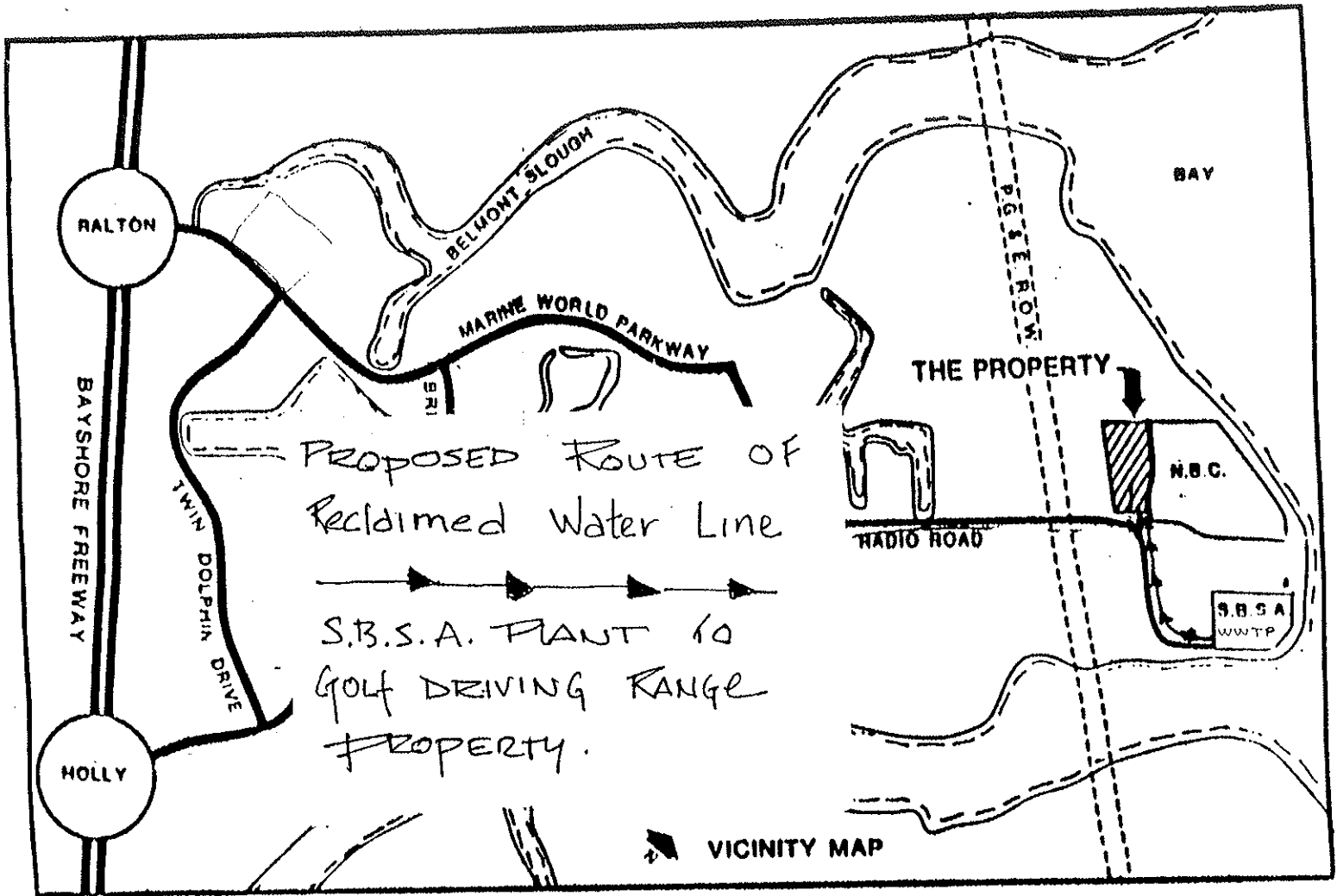
5. Producer shall submit 14 days' data to demonstrate consistent compliance with 23 MPN coliform organisms per 100 milliliter of effluent sample and reliability of the disinfection system prior to use of reclaimed wastewater.
6. The producer and user shall permit the Regional Board or its authorized representative:
 - a. Entry upon premises in which an effluent source is located or in which any required records are kept.
 - b. Access to copy any records required to be kept under terms and conditions of this Order.
 - c. Inspection of any monitoring equipment or method required by this Order.
 - d. Sampling of any discharge.
7. The user shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the user to achieve compliance with the water reclamation requirements.
8. The user shall file with the Regional Board a report on waste discharge at least one-hundred and eighty (180) days before making any material change or proposed change in the character, location, or volume of reuse.
9. If Chapter 4 of Title 22 of the California Administrative Code regarding reclamation criteria is amended and would affect these requirements, the Board shall amend these requirements as appropriate.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on April 30, 1985.

ROGER B. JAMES
Executive Officer

Attachments:

A. Map
Requirements of Design for Reclamation
Facilities dated 10/1/75
Guidelines for Worker Protection at
Water Reclamation Use Facilities
Self-Monitoring Program



SURROUNDING AREA
 &
APPROX. DISTANCES

300' FROM SPRINKLER TO RADIO ROAD

THE PROPERTY
 11.7 AC. ±

APPROX. LOCATION FIRST RECLAIMED SPRINKLER.

N.B.C.

A

KNBR REMOTE CONTROL TRANSMITTER BUILDING. (NOT STAFFED).

B

KGIE BUILDING - STAFFED DAYS & EVENINGS ONLY. DISTANCE FROM RECLAIMED WATER SPRINKLER 400' ±

970' ±

440' ±

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

South Bayside System Authority and SIBCO

San Mateo County

Reclaimed Wastewater Irrigation Project

ORDER NO. 85-40

CONSISTS OF

PART A

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSES AND OBSERVATIONS

Analyses, observations, and examinations shall be performed according to the specifications shown in Table I.

A. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the outfall from the reclamation facilities between the first point of reuse and the point at which all waste tributary to that outfall is present. (May be the same as E-001-D).
E-001-D	At any point in the disinfection facilities for Waste E-001 at which point adequate contact with the disinfectant is assured.

B. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
L-1 thru L-'n'	Located along the periphery of the irrigation areas at equidistant intervals, not to exceed 500 feet.

(A sketch showing the locations of these stations should accompany each report.)

II. MISCELLANEOUS REPORTING

- A. The discharger shall phone the Executive Officer immediately upon detecting a violation of any reclaimed water use specifications or prohibitions.
- B. The discharger shall submit with the first required monitoring report, adequate documentation that all equipment is adequately marked as required. Such documentation shall include, but not be limited to photographs and certification of compliance.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 85-40.
2. Has been adopted by the Regional Board on April 30, 1985 and becomes effective upon commencement of operation.
3. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger, and will be revised upon written agreement of the Executive Officer and the discharger.

ROGER B. JAMES
Executive Officer

Attachments

Table I and Legend for Table

TABLE 1 2/
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E-001	E-001 -D	All I Stat.
TYPE OF SAMPLE	C-24	Grab	Grab Obsv.
Flow Rate (mgd)	D		
BOD ₅ , 5-day, 20°C or CBOD (mg/l & kg/day)	D		
Chlorine Residual & Dosage (mg/l & kg/day)	H or Cont	H or Cont	
Settleable Matter (ml/l-hr. & cu. ft./day)		D	
Total Suspended Matter (mg/l & kg/day)	D		
Oil and Grease (mg/l & kg/day)		W	
Coliform (Total or Fecal) (MPN/100 ml) per req't			D
Fish Tox'y 96-hr. TL ₅₀ or % Surv'l in undiluted waste			
Ammonia Nitrogen (mg/l & kg/day)			
Nitrate Nitrogen (mg/l & kg/day)			
Nitrite Nitrogen (mg/l & kg/day)			
Total Organic Nitrogen (mg/l & kg/day)			
Total Phosphate (mg/l & kg/day)			
Turbidity (Jackson Turbidity Unit)	Cont		
pH (units)		D	
Dissolved Oxygen (mg/l and % Saturation)		D	
Temperature (°C)		D	
Apparent Color (color units)			
Secchi Disc (inches)			
Sulfides(if DO <5.0 mg/l) Total & Dissolved (mg/l)		D	
Arsenic (mg/l & kg/day)			
Cadmium (mg/l & kg/day)			
Chromium, Total (mg/l & kg/day)			
Copper (mg/l & kg/day)			
Cyanide (mg/l & kg/day)			
Silver (mg/l & kg/day)			
Lead (mg/l & kg/day)			

TABLE 1 (continued)

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E-001	E-001 -D	All I Stat.								
TYPE OF SAMPLE	C-24	Grab	Grab	Obsv.							
Mercury (mg/l & kg/day)											
Nickel (mg/l & kg/day)											
Zinc (mg/l & kg/day)											
Phenolic Compounds (mg/l & kg/day)											
All Applicable Standard Observations				D							
Bottom Sediment Analyses and Observations											
Total Ident. Chlor. Hydro- carbons (mg/l & lb/day)											

LEGEND FOR TABLE

TYPES OF SAMPLES

C = grab sample
 C-24 = composite sample - 24-hour
 C-X = composite sample - X hours
 (used when discharge does not
 continue for 24-hour period)
 Cont = continuous sampling

TYPES OF STATIONS

E = waste effluent stations
 L = reclamation facilities perimeter stations

FREQUENCY OF SAMPLING

E = each occurrence	2/H = twice per hour	2H = every 2 hours
H = once each hour	2/W = 2 days per week	2D = every 2 days
D = once each day	5/W = 5 days per week	2W = every 2 weeks
W = once each week	2/M = 2 days per month	3M = every 3 months
M = once each month		Cont = continuous

- (1) Observations shall include evidence of seepage outside irrigation area.
- (2) Effluent samples are required to be taken only on days any reclaimed wastewater is being diverted for reuse.